

BRANCH XIII: DIPLOMA IN ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Course Code	Course Title	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	FE	Total
SEMESTER 1								
THEORY								
X21101	ENGINEERING MATHEMATICS -I	4	1	-	5	25	75	100
X21102	PHYSICS	4	1	-	5	25	75	100
X21103	CHEMISTRY	4	-	-	4	25	75	100
X21104	ENGLISH	4	-	-	4	25	75	100
R21105	PROBLEM SOLVING AND C PROGRAMMING	4	1	-	5	25	75	100
PRACTICALS								
X21151	PHYSICS LABORATORY	-	-	2	1	25	75	100
X21152	CHEMISTRY LABORATORY	-	-	2	1	25	75	100
R21153	PROBLEM SOLVING AND C PROGRAMMING LABORATORY	-	-	3	1.5	25	75	100
R21154	INPLANT TRAINING	-	-	3	1.5	-	-	GRADE
X21155	PHYSICAL EDUCATION-I	-	-	2	1	-	-	GRADE
	TOTAL	20	3	12	29	200	600	800
SEMESTER 2								
THEORY								
X21201	ENGINEERING MATHEMATICS -II	4	1	-	4	25	75	100
X21202	CALCULUS AND ITS APPLICATIONS	4	1	-	4	25	75	100
R21203	APPLIED PHYSICS	4	-	-	4	25	75	100
R21204	CHEMISTRY OF ELECTRONIC MATERIALS	4	-	-	4	25	75	100
R21205	BASIC ENGINEERING GRAPHICS	2	-	3	3.5	25	75	100
PRACTICALS								
R21251	APPLIED PHYSICS LABORATORY	-	-	2	1	25	75	100
R21252	ENGINEERING CHEMISTRY LABORATORY	-	-	2	1	25	75	100
R21253	PYTHON PROGRAMMING LABORATORY	-	-	3	3.5	25	75	100
R21254	COMMUNICATIVE ENGLISH LABORATORY	1	-	2	2	25	75	100
X21255	PHYSICAL EDUCATION -II	-	-	2	1	-	-	GRADE
	TOTAL	21	-	14	28	225	675	900
SEMESTER 3								
THEORY								
R21301	STATISTICS AND PROBABILITY MODELS	4	1	-	5	25	75	100
R21302	ARTIFICIAL INTELLIGENCE- I	4	-	-	4	25	75	100
R21303	OPERATING SYSTEMS	4	-	-	4	25	75	100
R21304	DATA STRUCTURES	4	1	-	5	25	75	100
PRACTICALS								
R21351	DIGITAL IMAGE PROCESSING LABORATORY	1	-	3	2.5	25	75	100
R21352	ARTIFICIAL INTELLIGENCE - I LABORATORY	-	-	3	1.5	25	75	100
R21353	DATA STRUCTURES LABORATORY	-	-	3	1.5	25	75	100
R21354	R PROGRAMMING LABORATORY	2	-	2	3	25	75	100
R21355	TECHNICAL COMMUNICATION LABORATORY	1	-	2	2	25	75	100
	TOTAL	20	2	13	28.5	225	675	900

Legend: **CA**–Continuous Assessment; **FE**–Final Examination;

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SEMESTER 4								
THEORY								
R21401	ARTIFICIAL INTELLIGENCE II	4	1	-	5	25	75	100
R21402	SOFTWARE ENGINEERING	4	1	-	5	25	75	100
R21403	DATABASE SYSTEMS	4	-	-	4	25	75	100
R21404	DATA ANALYTICS USING PYTHON	4	-	-	4	25	75	100
PRACTICALS								
R21451	ARTIFICIAL INTELLIGENCE II LABORATORY	-	-	3	1.5	25	75	100
R21452	SOFTWARE ENGINEERING LABORATORY	-	-	3	1.5	25	75	100
R21453	DATABASE SYSTEMS LABORATORY	-	-	3	1.5	25	75	100
R21454	DATA ANALYTICS USING PYTHON LABORATORY	-	-	3	1.5	25	75	100
R21455	LISP PROGRAMMING LABORATORY	2	-	3	3.5	25	75	100
R21456	INTERNSHIP [#]	-	-	-	3	-	-	GRADE
	TOTAL	18	2	15	30.5	225	675	900
SEMESTER 5								
THEORY								
R21501	MACHINE LEARNING	4	1	-	5	25	75	100
R21502	JAVA PROGRAMMING	4	1	-	5	25	75	100
R21Exx	ELECTIVE THEORY- I	4	1	-	5	25	75	100
PRACTICALS								
R21551	MACHINE LEARNING LABORATORY	-	-	3	1.5	25	75	100
R21552	JAVA PROGRAMMING LABORATORY	-	-	3	1.5	25	75	100
R21553	OPEN SOURCES LABORATORY	-	-	3	1.5	25	75	100
R21554	DIGITAL ASSET MANAGEMENT LABORATORY	2	-	3	3.5	25	75	100
R21555	MINI PROJECT AND ENTREPRENEURSHIP	3	-	3	4	25	75	100
	TOTAL	17	3	15	27	200	600	800
SEMESTER 6								
THEORY								
R21601	DEEP LEARNING CONCEPTS	4	-	-	4	25	75	100
R21602	NATURAL LANGUAGE PROCESSING	4	-	-	4	25	75	100
R21Exx	ELECTIVE THEORY- II	4	1	-	5	25	75	100
PRACTICALS								
R21651	DEEP LEARNING LABORATORY	-	-	3	1.5	25	75	100
R21652	NATURAL LANGUAGE PROCESSING LABORATORY	-	-	3	1.5	25	75	100
R21653	ARTIFICIAL INTELLIGENCE OF THINGS LABORATORY	1	-	3	2.5	25	75	100
R21654	AUGUMENTED REALITY AND VIRTUAL REALITY LABORATORY	-	-	3	1.5	25	75	100
R21655	PROJECT WORK AND VIVA VOCE	-	-	9	4	25	75	100
	TOTAL	14	1	20	24	200	600	800

PROGRAM ELECTIVE COURSES (Two to be opted)

Course Code	Course Title	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CE	FE	Total
THEORY								
R21E01	CLOUD COMPUTING	4	1	-	5	25	75	100
R21E02	BIG DATA FRAMEWORK	4	1	-	5	25	75	100
R21E03	BLOCKCHAIN AND ITS APPLICATIONS	4	1	-	5	25	75	100
R21E04	BIOMETRIC SYSTEMS	4	1	-	5	25	75	100
R21E05	VIRTUAL COMPUTING	4	1	-	5	25	75	100
R21E06	DATA WAREHOUSING AND DATA MINING TECHNIQUES	4	1	-	5	25	75	100

Legend: **CA**–Continuous Assessment; **FE**–Final Examination;
[#] -Internship will be arranged for 4 weeks during the vacation at the end of 4th semester.